

material or film, and wherein each etching process cycle includes performing the following steps:

- (a) etching the material or film to increase the depth of the etched feature;
  - (b) depositing or forming a passivation layer on the surfaces of the etched feature; and
  - B1 (c) partially removing the passivation layer from the surfaces of the etched feature in order that the etching of subsequent etching process cycles proceeds in a direction substantially perpendicular to the material or film surface, wherein at least one of steps (a) or (b) is performed in the absence of a plasma.
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b2 27. (Amended) An apparatus for treating a substrate material or film present on the material surface, the apparatus comprising a chamber having a chemical inlet and a chemical outlet in which is positioned a support for receiving a substrate, the apparatus further comprising means for repeatedly performing an etching process cycle, wherein each etching process cycle increases a depth of an etched feature in the material or film, and wherein each etching process cycle carried out by said means includes etching a substrate material or a film present on the material surface with one or more appropriate chemicals, depositing a

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passivation layer on the surfaces of an etched feature, and partially removing the passivation layer from the etched feature in order that the etching of subsequent etching process cycles proceeds in direction substantially perpendicular to the material or film surface.

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33. (Amended) An apparatus for treating a substrate material or film present on the material surface, the apparatus comprising means for repeatedly performing an etching process cycle, wherein each etching process cycle increases a depth of an etched feature in the material or film, and wherein each etching process cycle carried out by said means includes etching the substrate material or the film present on the material surface with one or more appropriate chemicals, depositing a passivation layer on the surfaces of an etched feature, and partially removing the passivation layer from the etched feature in order that the etching of subsequent etching process cycles proceeds in a direction substantially perpendicular to the material or film surface, wherein each of the etching, depositing the passivation layer and partially removing the passivation layer are associated with the same or a separate chamber in which the substrate is positioned.

34. (Amended) A method of delivering a vapour into a chamber for etching a substrate positioned therein, the method comprising:

- (a) feeding etching solution into the chamber by creating etching solution droplets on or before entering the chamber; and
- (b) generating an electrostatic field to electrostatically attract the etching solution droplets to the substrate, thereby etching the substrate.

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35. (Amended) A method according to claim 34, wherein the droplets are provided with a positive or negative charge on or before entering the chamber, created by means of a high voltage power supply connected to a droplet inlet point into the chamber, and wherein the substrate is positioned on an electrode which is grounded with respect to the high voltage power supply.

37. (Amended) A vapour delivering apparatus comprising:  
a dielectric plate having a plurality of apertures extending therethrough from a back side of the dielectric plate to a front side of the dielectric plate; and  
By a continuous metallic layer covering the back side of the dielectric plate and side walls of the plurality of apertures and terminating through each aperture at the front side of the plate, wherein plurality of apertures having the sidewalls covered by the metallic layer define a respective plurality of nozzles.